

Trash Free Mystic River 2021 Watershed Community Engagement Report

EXECUTIVE SUMMARY

EPA and Mystic River Watershed Association (MyRWA) hosted three free information and discussion sessions on how to reduce the harmful inflow of trash into the Mystic River, aimed at beginning to develop a shared trash-reduction campaign in the watershed. Participants included municipal staff, community leaders, representatives of nonprofits, and volunteers who work on water quality and related topics in the Mystic River Watershed.

The first two sessions, on April 2 and April 14, 2021, included high-level context from EPA, MassDEP, MyRWA, and others, case examples from within and outside the Mystic Watershed, and time for participant discussion and exploration of the opportunities and challenges of enhancing water quality in the Mystic. The third session, held on May 6, 2021, was a working session to explore possible projects and identify shared priorities for regional watershed-wide trash reduction activities that would make a meaningful difference to the Mystic River now and into the future. Representatives from 17 municipalities, 3 state and federal agencies, and 7 nonprofits/community organizations participated in the dialogue series, as well as interested community members.

This document contains a high-level synthesis of the key discussion themes from the sessions proposals for three highest priority projects in the watershed. Please click [here](#) to view materials from the three sessions.

The Planning Team included:

- Sushant Bajracharya, Mystic River Urban Waters Federal Partnership Ambassador
- Ona Ferguson, the Consensus Building Institute (CBI)
- Andrew Hrycyna, Mystic River Watershed Association (MyRWA)
- Layne Marshall, Environmental Protection Agency (EPA) Trash Free Waters
- Darya Mattes, Mystic River Urban Waters Federal Partnership Ambassador
- Romell Nandi, EPA Trash Free Waters
- Maggie Osthues, CBI
- Caitlyn Whittle, EPA Region 1

Coming out of the three dialogues, the planning team identified three project concepts to develop further, in collaboration with municipalities in the Mystic River Watershed:

1. **A Trash Assessment** to better understand where the trash that goes into the Mystic River and its tributaries comes from, with the ultimate goal of developing strategies that will have the greatest impact on trash reduction. A trash assessment is seen as a first step to ensure that action in the future will be efficient and appropriate.
2. **Inlet Guard Installment and Street Sweeping Enhancements** to help municipalities in the Mystic River Watershed identify and implement infrastructure installation and maintenance best practices that will reduce trash going into the waterways.
3. **Storm Drain Stewardship Program (Adopt a Storm Drain)** to engage volunteers and raise public awareness, with the aim of changing behavior around storm drains to reduce the amount of trash going into storm drains and to educate the public about the complexities of stormwater management and pollution in the context of trash in waterways, specifically the Mystic River. Building a more educated and empowered public can help reduce flooding and pollution through physical care of the drains as well as build political support for municipal infrastructure investments as a way to protect water quality.

REPORT CONTENTS

Session 1 April 2, 2021 1 – 3 PM ET	3
Session 2 April 14, 2021 3-5 PM ET	6
Session 3 May 6, 2021 9 AM – 12 PM ET	9
Outcomes: Watershed Project Concepts	12

Session 1 | April 2, 2021 | 1 – 3 PM ET

SESSION SUMMARY

This first virtual session focused on the impact of trash in the Mystic River Watershed and some lessons learned and best practices for trash reduction and capture, featuring three presentations and a robust discussion period.

Andrew Hrycyna, Watershed Scientist at Mystic River Watershed Association (MyRWA), provided an orientation for attendees on the implications of trash in the Mystic River and ongoing efforts to address this issue. Matt Robinson, Environmental Protection Specialist, D.C. Department of Energy & Environment, then provided specific examples of trash reduction efforts in rivers and streams around Washington, D.C. – focusing on the Anacostia River Trash TMDL, structural and non-structural trash capture and reduction efforts, and the specific consideration for microplastics. Narrowing in on one specific structural control, Laura Schifman, Ph.D., State Stormwater Coordinator, MassDEP, presented on inlet guards as a measure to prevent trash from entering storm drains, highlighting details on cost, effectiveness, and example implementation requirements. **Please see [here](#) to view/download the session slides.**

Following presentations, session participants and presenters engaged in open, full-group discussion. Below is a synthesis of the key discussion themes.

KEY DISCUSSION THEMES

Resources shared in the meeting chat:

- California Trash Monitoring Playbook, which references EPA's recently released Escaped Trash Assessment Protocol <https://www.sfei.org/documents/california-trash-monitoring-methods-and-assessments-playbook>
- Oakland Inlet Guard Study: <http://basmaa.org/Announcements/tracking-cas-trash-street-sweeping-curb-inlet-screen-evaluation>
- EPA's Escaped Trash Assessment Protocol (ETAP), available here: <https://www.sfei.org/documents/california-trash-monitoring-methods-and-assessments-playbook> The ETAP Reference Manual and Excel Spreadsheet Tool can be downloaded here: <https://www.epa.gov/trash-free-waters/epas-escaped-trash-assessment-protocol-etap>

Microplastics: Participants asked where testing for microplastics can be done in the greater Boston area. Some suggestions included reaching out to Woods Hole Group; following up on the work that Merrimack Valley Planning Commission's Coastal Coordinator Peter Phippen is conducting with local universities; and learning more about the work that the EPA Office of Research and Development has been doing on microplastics protocols, specifically the efforts of Phil Colarusso in Region 1 on the nexus between microplastics and eelgrass beds. Planning team member Romell Nandi, EPA, highlighted that microplastic protocols vary from other trash protocols and require specialized lab protocols.

Trash TMDLs: Trash TMDLs are very uncommon. Only California, Maryland, and Washington, D.C., have trash TMDLs as of right now. Additionally, only roughly 9 states have impaired waterbody listings under the Clean Water Act for trash.

Protocols for Volunteer Trash Collection Programs: Participants requested an easy-to-use protocol for volunteers to classify the trash they collect from waterways, raising concerns about over-burdening volunteers and protecting them from hazardous materials.

- Presenter Matt Robinson offered to share the protocols employed in Washington, D.C., as well as guidance on how those programs measured the weight and volume of trash collected. He noted that the programs have lowered the amount of time spent sorting and counting by doing a sampling event once per season.
- Planning team member Romell Nandi, EPA, offered to share examples of other existing protocols from the EPA Trash Free Waters Program. He noted that protocols vary depending on program goals – whether the focus is on rapid assessment or detailed characterization to inform tailored upstream trash management interventions. The San Francisco Estuary Institute created a playbook of trash protocols in the state of California, which references EPA's Escaped Trash Assessment Protocol (ETAP), available here: <https://www.sfei.org/documents/california-trash-monitoring-methods-and-assessments-playbook> The ETAP Reference Manual and Excel Spreadsheet Tool can be downloaded here: <https://www.epa.gov/trash-free-waters/epas-escaped-trash-assessment-protocol-etap>

Policy Intervention Effectiveness: Participants asked about the effectiveness of ordinances banning plastic shopping bags and other items, like straws and foams.

- Presenter Matt Robinson commented that the shopping bag ban has been effective in the Washington, D.C. context, with 77% compliance driven by an active enforcement program. The foam ban has had 85% compliance, and there are no numbers available for the straw ban.

Multi-pronged approach: A sustainable, long-term solution to trash in watersheds will likely need to rely both on trash capture, which has been effective in the Washington, D.C. context, as well as reduction efforts. Presenter Matt Robinson noted that, the further you move downstream from the source of the problem, the more expensive the intervention becomes. Trash capture and reduction efforts closer to the sources of the issue will likely be more cost-effective.

Ongoing trash capture efforts: Participants mentioned ongoing efforts, like adopt-a-drain programs, and discussed how to pair structural and non-structural efforts to reduce trash in the watershed. Participants also noted that dog waste collection is a problem requiring further investments in education and infrastructure.

- Presenter Laura Schifman noted that the installation of inlet guards will likely require additional street sweeping to collect the trash that is no longer entering storm drains, and that these interventions may be better targeted to commercial and industrial areas with more foot traffic and potential for trash. She suggested that a volunteer program that helps collect trash could be used as a citizen science effort for characterizing what kinds of trash is accumulating to inform policy decisions.

Aligning & funding stormwater and trash reduction efforts: Participants asked about how measures like inlet guards could impact stormwater management efforts.

- Presenter Laura Schifman commented that other states' or municipalities' requirements on installing inlet guards could be a good resource to ensure that stormwater can still flow to catch basins. She highlighted that inlet guards would have to be partnered with street sweeping to ensure that drains are not being clogged and that stormwater utility fees or other financing tools may be necessary to fund implementation of controls.
- Presenter Matt Robinson noted that federal stimulus money could be a pathway to funding, citing that Los Angeles, CA, used some stimulus funding to implement some of their control measures.

Session 2 | April 14, 2021 | 3-5 PM ET

SESSION SUMMARY

This second virtual session shared more lessons learned and best practices for trash reduction and capture, both within and outside of the Mystic River Watershed, featuring four presentations and a robust discussion period.

Presentations included:

- Grace Lee, ReThink Disposable Program Director, Clean Water Action presented on source reduction initiative benefits to businesses and government in California.
- Josh Kogan, Trash Free Waters Coordinator, EPA Region 2, shared examples of existing trash reduction initiatives of hydration stations in the New York/New Jersey State Parks as well as trash capture efforts using inlet guards in the Hudson River Watershed.
- Robert Lowell, Deputy Chief Engineer, MA Department of Conservation and Recreation (DCR), provided an overview of DCR's trash removal policies under their stormwater program.
- Newton Tedder, EPA Region 1, spoke to stormwater quality and trash reduction in the Massachusetts MS4 permit context.

Please see [here](#) to view/download the session slides and watch a recording of the session.

Following presentations, session participants and presenters engaged in open, full-group discussion. Below is a synthesis of the key discussion themes.

KEY DISCUSSION THEMES

Resources shared in the meeting chat:

- ReThink Disposable's website: <https://www.rethinkdisposable.org/resources>; Hang Ten Boiler case study: <https://drive.google.com/file/d/13C8wmpuj0yfvInxBE7HuybtHZxDYWr4/view?usp=sharing>
- Durham, NC, third-party-run reuse system: <https://durhamgreentogo.com/>
- City of Chelsea dog waste and cigarette butt station maps: <https://www.chelseama.gov/public-works/bulletins/dog-waste-station-and-cigarette-butt-map>
- EPA Trash Free Waters program "Trash Stormwater Permit Compendium": <https://www.epa.gov/trash-free-waters/trash-stormwater-permit-compedium>. The Trash Stormwater Permit Compendium is one in a series of documents developed by EPA as a resource for stormwater permit writers. The purpose of this compendium is to provide Phase I and Phase II Municipal Separate Storm Sewer System (MS4) permit writers with tools and information they can use in developing trash-related provisions for MS4 permits. The Trash Stormwater Permit Compendium is also a useful tool for stormwater management planners, watershed planners, and others interested in how to insert effective trash measures into their planning documents.
- Trash Sources & Pathways Visualized by SCVURPPP (Poster): https://www.mywatershedwatch.org/wp-content/uploads/How-Trash-Gets-into-Creek-Poster-SFR_May2014-hi.pdf

- Frontline news piece on plastic recycling. It provides another perspective on challenges with plastic recycling, the impacts to the environment and vulnerable groups.
<https://www.pbs.org/wgbh/frontline/film/plastic-wars/>

Source reduction at restaurants: Participants asked whether restaurants are typically open to people bringing their own containers, how restaurants treat their old stock of single-use ware as they transition to more sustainable methods, and key considerations for implementing source reduction programs with businesses.

- Presenter Grace Lee noted that the COVID-19 pandemic has affected some restaurants' ability to use BYO practices, but there has been some outreach and education that BYO is safe despite the pandemic. She commented that restaurants typically use up their existing stock of single-use ware during their transition to more sustainable methods – packaging takeout sustainably will continue to pose a challenge, especially with increased takeout business during the pandemic.
- Grace highlighted that funding and staff capacity is essential for implementing source reduction efforts with businesses. Especially in the food service industry, where profit margins are razor thin, having a sort of government- or grant-subsidized program to cover technical assistance and engagement is important.
- One participant asked if MA DEP SMRP funds could be used for a multi-town contract to study the potential for eliminating single-use ware in schools.

Measuring reduction impact of hydration stations: Participants asked how state agencies monitored and calculated the impact of their hydration stations.

- Presenter Josh Kogan commented that state agencies arrived at the number of plastic bottles eliminated through both counts of volume of water filled at stations as well as visual inspections of the number of plastic bottles throughout parks. Agency monitoring did shift from weekly to monthly, which may speak to staff capacity.

DCR's trash capture policies: Participants asked whether DCR will re-install trash cans in urban parks, if DCR has pet waste stations, and how people can access DCR's data on trash collection.

- Presenter Robert Lowell shared that DCR is likely returning to its previous number of trash barrels in urban parks with dumpsters at larger facilities. (Trash barrels had been reduced during the pilot of a "carry in, carry out" initiative.) He commented that DCR parks have Mutt Mit collection stations for pet waste as well as disposal receptacles.
- Robert highlighted that DCR is currently sharing its trash collection data, which only captures information within DCR's boundaries, with Boston, Quincy, and Somerville, and would be open to sharing with other municipalities. He noted that DCR would be interested in collaborating with Friends groups.

Impact of illicit connections on Mystic stormwater: Participants asked about the impact of old or undocumented sewage outfall sites contributing to phosphorus contamination in the Mystic.

- Presenter Newton Tedder shared that there are illicit connections throughout all watersheds in Massachusetts, more and more of which are reported each year. He highlighted that we know that a part of the issue is those connections, but it's not the

whole story. Newton stressed that we need to rethink how we manage stormwater in every watershed across the state – moving from traditional ways of looking at it as a waste stream to thinking of it as an asset.

Incorporating source reduction into Trash TMDLs: Participants asked about how source reduction efforts could be included in future permits, like Trash TMDLs.

- Presenter Newton Tedder commented that having metrics is essential and powerful for building a regulatory program. A source reduction program like ReThink Disposable could be presented as a regulatory option or best management practice in an MS4 Permit context.
- Presenter Josh Kogan highlighted that, in Region 2, there is no Trash TMDL in NYC, but the city has worked with EPA and New York State to develop an aggressive MS4 Permit that includes efforts to demonstrate reduction of land-based trash. Otherwise, permittees have to reduce trash to the maximum extent practicable, where a multi-pronged approach to trash reduction and capture can be a strategy. Forming plans for how to reduce trash will depend on the permittee, the body of water, presence of TMDL, etc.
- Planning team member Romell Nandi, EPA, noted that only three states have Trash TMDLs, and that number is not expected to grow significantly in the short-term. EPA Trash Free Waters program's new "[Trash Stormwater Permit Compendium](#)" shows that there are a lot more permits prescribing certain technical approaches or reporting on quantities removed or prevented as opposed to prescribing a particular limit. He noted that it will be interesting to observe how prescriptive permits will become regarding trash management.
 - On the topic of resistance in communities to prescribed practices, Josh noted that mandating dumpster covers was one measure initially implemented and then removed from the NYC MS4 Permit because it was considered an unfunded mandate.

Potential trash capture and reduction efforts: Participants suggested efforts like expanding the bottle bill, pursuing a state-wide zero waste program, enforcing covered trash receptacles, encouraging more responsible pet owner handling of dog waste, and rewarding/recognizing restaurants regionally transitioning away from single-use ware as potential strategies to reduce trash into the Mystic.

Session 3 | May 6, 2021 | 9 AM – 12 PM ET

SESSION SUMMARY

This third virtual session featured large and small group discussions to identify types of projects that are likely to be compelling to local communities and leaders in the Mystic. In advance of the session, the planning team put together a [brief document](#) of potential trash reduction project categories and ideas building from the first two sessions. Below is a synthesis of the key discussion themes.

Please see [here](#) to view/download the session slides and [here](#) to watch a recording of the session.

KEY DISCUSSION THEMES

Participants participated in large and small group discussions to identify 2-3 scalable ideas to advance in the Mystic River Watershed to reduce trash. Small groups were broken up into three topics: research, infrastructure, and education. Participants explored regional projects that may be promising in each of the topics and considerations for implementation. Key discussion themes from small and large groups about potential project concepts to advance trash reduction in the watershed included:

Policy:

- Participants noted zero waste policies and programs as an opportunity to reduce trash, referencing some proposed policies that would make producers responsible for the full recovery and safe disposal of products and materials. There are some existing zero waste efforts statewide and locally, in communities like Cambridge, Medford, and Arlington.

Research:

- Participants asked if there are any studies being done about the seasonality of trash in the Mystic and the potential to identify critical times or events, similar to managing leaves.
- Further research on microplastics and the relationship with sewer system was requested.
- Key questions to answer: What research already exists? Who is already doing research? How can we apply similar methods in the watershed?
- Participants emphasized the opportunity presented by conducting local research with useful results, including partnering with local universities.

Infrastructure & Maintenance:

- Participants spoke about the importance of local equipment, like lids for trash and recycling bins. Some municipalities are looking to transition to lids (perhaps with support from the [Recycling Partnership](#)), so there could be an opportunity to study the impact of lids on trash reduction in the watershed. EPA's Trash Free Waters program in DC is currently writing a case study report on a pilot project in DC regarding litter associated with curbside disposal behaviors that could also help shed some light on effectiveness of bins and lids.
- Participants also discussed inlet guards, and a participant from the Department of Conservation & Recreation (DCR) shared interest in doing further research on inlet guards and designing a pilot project on DCR properties near the Mystic River. Participants noted

the need to balance trash mitigation with flood control, and the need for a robust street-sweeping program to complement installation of inlet guards.

- Trash booms, solar compacting bins, inlet guards, and hydration stations were all named as potential infrastructure to include in trash reduction efforts.
- Participants identified maintenance as a key element and principal cost, noting that the true cost is the long-term maintenance of any intervention. There may be issues of competing with private contractors for staffing for maintenance.
- On funding, participants commented that grant funding is more available for capital investments versus sustaining salaries. Questions were raised about the feasibility of tying a funding model into stormwater utility funding or EJ funding if data bears that out.
- Discussion also covered politics and logistics around regional collaborations, highlighting that getting key political stakeholders, like mayors, to advocate for collaboration would be an important path forward.

Community Education & Stewardship:

- Participants shared that youth education, at all ages, is a great opportunity to reach both students and parents, citing MyRWA's latest presentation by Marion Miller as an effective example of youth stormwater engagement. Participants also noted that existing recreational groups and events are good places for community engagement and education about the health of the Mystic River.
- A participant from Medford shared about a new Adopt-a-Storm Drain program launching in 2021 that is looking to involve families and school programs in citizen science to help maintain storm drains and reduce trash going into drains. Participants noted that this project would be scalable to other communities in the watershed.
- Participants discussed the increasing frequency of cleanups and the importance of trash cans and their placement and distance, including smart cans and big belly cans.
- An adopt-a-drain program was recommended as a potential watershed-wide stewardship and education project.
- Participants also discussed community outreach on single use plastics, noting that even people who care and would like to be stewards still may not know what they can do to help. There could be an opportunity to use signage and communications in businesses about decisions consumers can make to avoid single-use ware to help the environment.

Following discussion of potential projects and implementation considerations, participants explored what criteria should guide the planning team in identifying 2-3 scalable projects for trash reduction in the watershed. Key insights included:

- It would be valuable to develop and implement a pilot for a scalable project across the watershed.
- It is important to understand "hot spots" first, then looking at cost and feasibility, when designing projects. This may involve more assessment or scoping work being done prior to piloting projects.
- It would be efficient to build on where there is already community energy on this topic, especially among youth and environmental groups
- An important task for project design will be bringing in key voices (e.g., Departments of Public Works representatives for infrastructure and street sweeping solutions)
- A priority will be focusing on how engagement and projects can serve EJ and underserved communities.

- There is a question of capacity and accountability, especially considering what's feasible and desirable for municipalities to implement in the Covid context.

Resources shared in the meeting chat:

- ReThink Disposable's website: <https://www.rethinkdisposable.org/>
- City of Cambridge's Zero Waste Master Plan: <https://www.cambridgema.gov/Departments/publicworks/Initiatives/zerowastemasterplan>
- City of Arlington's EcoWeek Outdoors for All event: <https://www.arlingtonma.gov/departments/public-works/recycling-trash-composting/eco-week-events>

Outcomes: Watershed Project Concepts

Coming out of the three dialogues, the planning team identified three project concepts to develop further, in collaboration with municipalities in the Mystic River Watershed. These project concepts were further developed with some follow up discussions with representatives from various communities in the Mystic River Watershed that participated in the dialogue series.

TRASH ASSESSMENT

Goal: To better understand where the trash that goes into the Mystic River and its tributaries comes from, with the ultimate goal of developing strategies that will have the greatest impact on trash reduction. A trash assessment is seen as a first step to ensure that action in the future will be efficient and appropriate.

Initial interested municipalities, agencies, and watershed organizations: MyRWA, MA DEP, Green Roots, 3 municipalities (Somerville, Cambridge, Malden)

Initial thoughts on approach: Combine results from various forms of research to get a better picture of the trash issue in the Mystic River watershed as related to the watershed's water bodies. Some project tasks and guiding questions could include:

- Conduct desk research: what research has been done on the mechanisms by which waste material becomes “escaped trash” (littering, accidental release from trash collection, etc.)? Are the pathways well-understood in general? What was discovered about sources in cities that have had Trash TMDLs? Were the findings consistent across cities?
- Research trash boom pilots in 2022: Which municipalities are excited about participating? How do we work to identify the most helpful outfalls to investigate? What are the practicalities of coordinating with municipalities here? What sampling regimes have been used in other watersheds?
- Data collection (professional or citizen science), including additional EPA visual trash assessments (VTA) to identify areas of the city (or land-use types) that contribute the most trash? (We have some preliminary data on this, with more coming in from 2021.)
- How do we tap local expert knowledge about hot-spots of trash in each municipality? Who are the people best in a position to advise? DPW directors and ground crews? What means of transferring their knowledge is best?
- Can we imagine a crowd-sourced mapping that is more informal than the EPA VTA protocol but still helpful – a survey or a call to add data to an online map?

INLET GUARD INSTALLMENT & STREET SWEEPING ENHANCEMENTS

Goal: To help municipalities in the Mystic River Watershed identify and implement infrastructure installation and maintenance best practices that will reduce trash going into the waterways.

Initial interested municipalities, agencies, and watershed organizations: MyRWA, MA DEP, 5 municipalities (Malden, Medford, Chelsea, Arlington, Somerville).

Initial thoughts on approach: Explore the feasibility of a two-part approach (in parallel or sequential):

- a. **Install inlet guards on storm drains**, in cities where these are applicable, and especially in areas where our research tells us trash is more likely to be getting into the storm drains.
- b. **Increase street sweeping capacity and intensity.** Inlet guards only work as a solution in conjunction with enhanced street sweeping. Enhanced street sweeping alone is a possible stand-alone solution.

Some action steps and guiding questions could include:

- Convene people to work together - likely DPW staff from all the Mystic municipalities or from a select group of pilot communities
- With this group, discuss best practices and explore infrastructure questions on inlet guards and street/sidewalk sweeping and stormwater maintenance. Topics would include:
 - Are we doing adequate maintenance currently? Are we vacuuming out catch basins regularly?
 - Are hoods that prevent trash from leaving catch basins installed as widely as they might be, and how effective are they?
 - Do we have the best street sweeping equipment or are there machines that need upgrading?
 - Could shared purchasing of services or of machinery help?
 - What budget scenarios could have a significant impact both with inlet guards and with enhanced street sweeping?
 - What are the barriers to increasing the frequency and intensity of street sweeping?
- Consider strategies to help each other (e.g., shared purchasing, collective training)
- Record current practices / conduct baseline research. Review where streets are swept now on municipal and state owned roads (e.g., Fellsway)
- Conduct a pilot project by installing a number (to be determined) of inlet guards and/or adopting new street sweeping policies within one year
- Research and record the impact of those policies or infrastructure installed (record amount of debris removed, miles swept, guards installed) and discuss lessons learned

STORM DRAIN STEWARDSHIP PROGRAM (ADOPT A STORM DRAIN)

Goal: To engage volunteers and raise public awareness, with the aim of changing behavior around storm drains to reduce the amount of trash going into storm drains and to educate the public about the complexities of stormwater management and pollution in the context of trash in waterways, specifically the Mystic River. Building a more educated and empowered public can help reduce flooding and pollution through physical care of the drains as well as build political support for municipal infrastructure investments as a way to protect water quality.

Initial interested municipalities, agencies, and watershed organizations: Sign-on from 14 municipalities (Arlington, Burlington, Cambridge, Chelsea, Everett, Lexington, Medford, Melrose, Reading, Revere, Somerville, Watertown, Winchester, Woburn), MyRWA

Initial thoughts on approach: Pursue a two-pronged approach focused on both expanding an existing program across the watershed as well as broadening and deepening existing youth engagement and education around the program across the watershed.

- a. **Expand the Adopt-a-Drain Program** launched in Medford in 2021 to multiple municipalities in the watershed.
- b. **Explore the possibilities of including schools in an Adopt-a-Drain or Adopt-a-Street effort.** Raise awareness among children in schools or through other youth programs (e.g. Eagle Scouts, who have painted stormwater medallions in Malden) . Build from the curriculum and content that Medford is using, which they are willing to share. MyWRA has a good program on water that can be used in the watershed. Support those municipalities who want to do this education and awareness raising through a peer group. Help the children educate their adults. This work could involve getting city council's on board or supportive. A curriculum could be connected to the larger water system and go beyond just plastics or trash.

Note: Medford's program for drain maintenance is limited to people 18 and over for liability reasons. Further thinking is needed about how to involve children, how to talk about this in classrooms if rolled out.

The project team at MyRWA went on to develop a specific project proposal for each of these concepts, with timelines and budgets, for submission to competitive grant RFPs:

1. **The Mystic Trash Mapping Project**, an environmental education project centered on an innovative use of Google Street View imagery and crowd-sourced data collection. The interactive website would be both an engaging educational platform and a management tool, generating data that would help managers understand where the sources of escaped trash are in their municipalities.
2. **Inlet guard and street sweeping feasibility analysis proposal.** A proposal to conduct a year-long feasibility study to explore the technical, financial, and political opportunities for installing inlet guards and intensifying street sweeping regimes at a regional scale.
3. **Watershed-wide Adopt-a-Storm-Drain program.** A proposal to expand the existing Adopt-a-Drain program in Medford, MA, across our watershed.